

# **Treatment of infective internal root resorption with mta and thermoplasticised gutta-percha**

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## **Introduction**

Infective internal root resorption occurs as a result of a vascular response to microorganisms invading the pulp space. This process is associated with an inflammatory response that increases until the pulp becomes necrotic. If allowed to progress, the resorptive process can destroy the entire root. However, early detection and new methods of treatment must improve the prognosis.

## **Aim**

The aim of the current research was to evaluate the effectiveness of treating infective internal root resorption with the combination of MTA and thermoplasticised gutta-percha.

## **Materials and methods**

The objects of the research were 3 patients aged 35–44 years with infective internal root resorption of teeth #1.1, #2.1 and #4.4. The diagnosis was made according to electric pulp testing, intraoral radiography and cone-beam computed tomography (CBCT). All the teeth were endodontically treated using MTA together with the thermoplasticised gutta-percha. The control recalls were made in 6 months.

## **Results**

The positive result of treating infective internal root resorption was achieved in two visits. The 1st visit included isolation with a rubber dam, access the pulp cavity, removal of the necrotic pulp tissue, chemical debridement with sodium hypochlorite solution in the canal and the resorption lacuna, activation of the irrigant with an ultrasonic tip, temporary filling the root canal with calcium hydroxide and the access cavity with glass ionomer cement (GIC). The 2nd visit was conducted in 3 weeks. It involved the removal of temporary filling, irrigation of the root canal with EDTA, sodium hypochlorite irrigation and chlorhexidine, canal drying with paper points, obturation of the open apex and resorption lacuna with MTA, followed by thermoplasticised gutta-percha and restoration of the coronal cavity with composite.

## **Conclusions**

Follow-up radiographs over 6 months demonstrated the good prognosis of teeth with infective internal root resorption treated by combination of MTA and thermoplasticised gutta-percha that proves the high effectiveness of this method of treatment.